

# HOEK-003

Subsea Angle Transmitter



N-Seatec Subsea Systems BV  
Industrieweg 29  
4301 RS Zierikzee  
P.O. Box 39  
4300 AA Zierikzee  
The Netherlands

t +31(0)111 456100  
f +31(0)111 456111  
e [info@n-seatec.com](mailto:info@n-seatec.com)  
[www.n-seatec.com](http://www.n-seatec.com)

Trade Register no 52686159  
Bank RABOBANK 119606992  
IBAN NL42RABO0119606992  
BIC RABO NL2U  
VAT NL8505.52.308.B.01

## Product highlights

- Heavy duty subsea angle transmitter with proven reliability in harsh and abrasive environments.
- Designed for angle measurement of suction tubes, booms and other (submersible) construction parts.
- Depth rate 2500 msw (with connector), 100 msw (with penetrator), 50 msw (with gland).
- Corrosion resistant oil filled and pressure compensated AISI 316 stainless steel housing and AISI 431 stainless steel shaft.
- Provided with 2 different mounting thread hole patterns.
- Several mounting and coupling accessories are deliverable.
- Fitted with an analog 4...20 mA transmitter for angular ranges from 0 up to 355°.
- Fitted with a BH4MSS stainless steel standard bulkhead connector.
- Optionally available with all stainless steel cable gland with integrated penetrator and hose socket or micro bulkhead connector.



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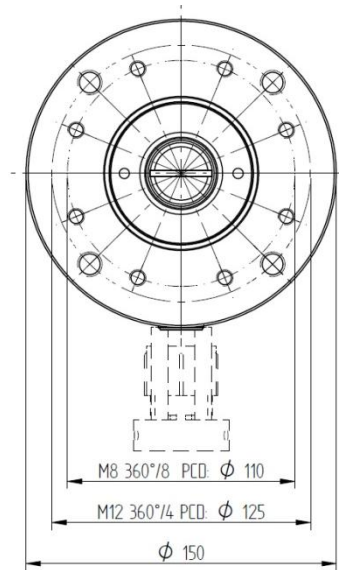
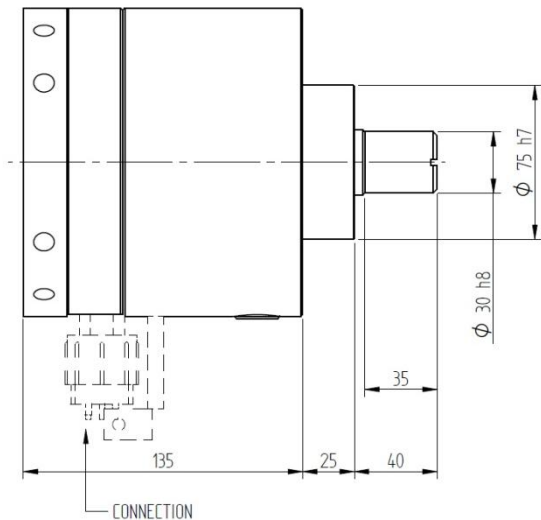
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## Specifications

### Housing

- Housing material	AISI 316	- Operating temperature	-30..+100 °C
- Shaft material	AISI 431	- Depth rate <i>connector</i> types	2500 msw
- Dry weight	Approx. 15 kg	- Depth rate <i>penetrator</i> type	100 msw
- Dimensions	See below		



### Sensor

- Sensor principle	Potentiometer
- Measurement angle	0..355°
- Minimum range	0...53°
- Supply voltage	18..28 VDC
- Max. load	600 $\Omega$
- Power consumption	31 mA max.
- Output	4-20 mA
- Linearity error <sup>1</sup> / 355 °	+/-0.1 %
- Resolution / 355 °	0.002 %
- Thermal sensitivity shift	0.01 %/K max.
- Operating temp.	-30...+70 °C
- Connections	2

### Analog

- Sensor principle	Potentiometer
- Measurement angle	0..355°
- Minimum range	0...53°
- Supply voltage	18..28 VDC
- Max. load	600 $\Omega$
- Power consumption	31 mA max.
- Output	4-20 mA
- Linearity error <sup>1</sup> / 355 °	+/-0.1 %
- Resolution / 355 °	0.002 %
- Thermal sensitivity shift	0.01 %/K max.
- Operating temp.	-30...+70 °C
- Connections	2

<sup>1</sup> At constant temperature. Valid for measurement ranges up to 345 °.

### Connection

- Waterblock	Yes
- Cable outer diameter	< 12 mm
- Hose inner diameter	25 mm
- Operating temp.	-40...+100 °C
- Dimensions	See below

### PENE-2

- Waterblock	Yes
- Cable outer diameter	< 12 mm
- Hose inner diameter	25 mm
- Operating temp.	-40...+100 °C
- Dimensions	See below

### Bulkheads

- Waterblock	Yes
- Cable outer diameter	N.A.
- Hose inner diameter	N.A.
- Operating temp.	-4...+60 °C



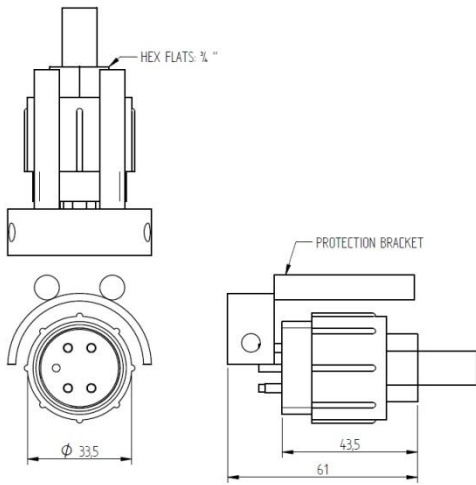
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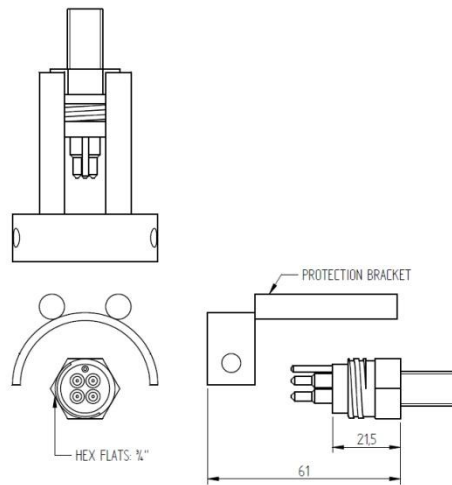
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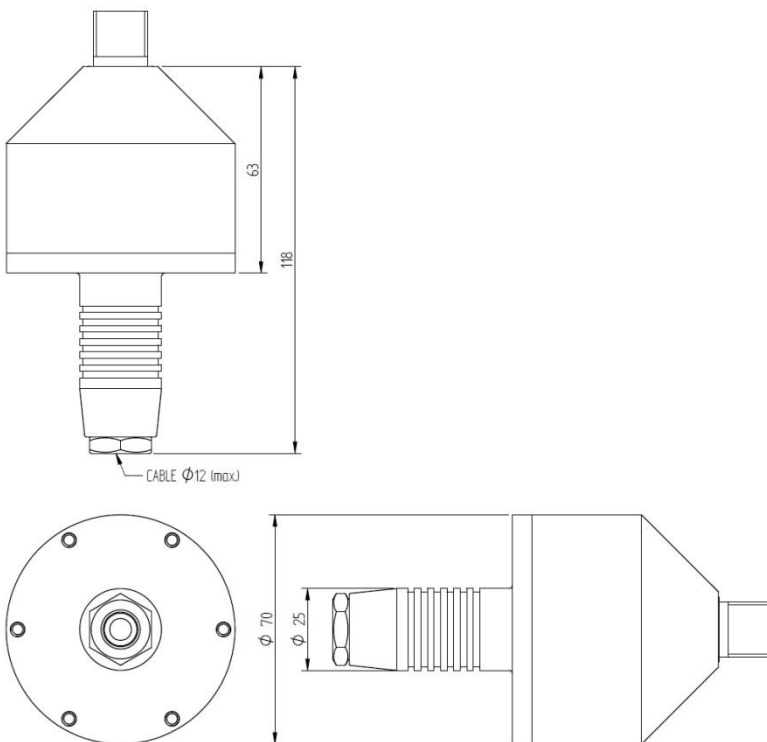
## HOEK-003-BHxMSS (x≤5)



## HOEK-003-MCBHxMSS (x≤8)



## HOEK-003-PENE-2



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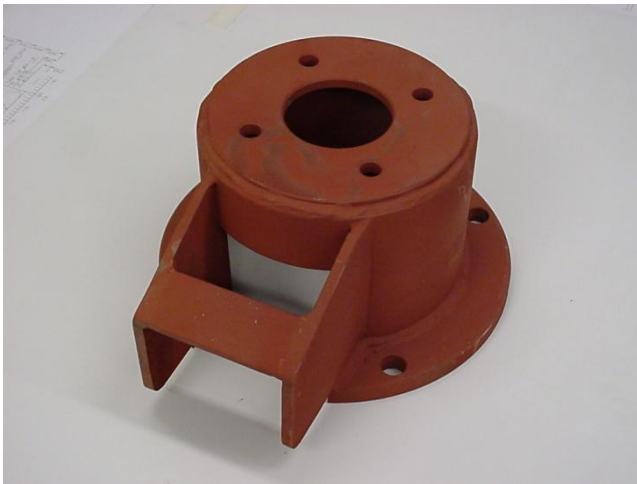
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## Type code definition

Type code	Specification	- Sensor	- Range	- Interface	- Connection
<b>HOEK-003</b>	Subsea angle transmitter, heavy duty, pressure compensated, IP68 < 2500 m				
<b>Sensor</b>	Analog Range: 0...355 ° max., 0...53 ° min. Resolution: ∞ Non-linearity: ±0.1 % max. Current output: 4...20 mA Connections: 2	- <b>ANALOG</b>	- <b>0...xxx°</b>	- <b>4...20 mA</b>	
<b>Connection</b>	Standard bulkhead, x (≤ 5) pin (male), stainless steel				- <b>BHxMSS</b>
	Micro bulkhead, x (≤ 8) pin (male), stainless steel				- <b>MCBHxMSS</b>
	Penetrator + gland + socket, 2 wire, stainless steel				- <b>PENE-2</b>
<b>Example</b>	<b>HOEK-003</b>	- <b>ANALOG</b>	- <b>0...180°</b>	- <b>4...20 mA</b>	- <b>BH4MSS</b>

## Optional accessories

For mounting and coupling purposes, various optional accessories are available:



Installation and protection hood.



SEATEC

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Standard coupling.



Flexible coupling.



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